Detection Circuit Having an Adaptive Threshold

ABSTRACT

A voltage detection circuit utilizes a comparator to compare first and second input voltages to generate a control signal when the difference between the first and second input voltages exceeds a threshold. The threshold voltage is generated by injecting a known current into a resistance in series with one of the inputs. The voltage detection circuit utilizes a first level of injected current when the input differential voltage differs from the threshold by a predetermined voltage level. The injected current rises to a second level as the second input voltage approaches the first input voltage in order to obtain a more accurate voltage comparison.